

We claim:

1. An ink formulation comprising:
0.5 to 15% by weight of a pigment,
0.5 to 30% by weight of polypropylene glycol, and
55 to 99% by weight of water, wherein the percentages are based on the overall weight of the ink formulation.
2. The ink formulation as claimed in claim 1, wherein the ink formulation comprises:
1.5 to 7% by weight of the pigment,
3 to 14% by weight of the polypropylene glycol, and
60 to 95.5% by weight of the water.
3. The ink formulation as claimed in claim 1, wherein the ink formulation further comprises at least one additive.
4. The ink formulation as claimed in claim 3, wherein the additive is selected from the group consisting of co-solvents, bases, surfactants, deaerators and biocides.
5. The ink formulation as claimed in claim 1, wherein the polypropylene glycol has a molecular weight of greater than 250 to about 1000.
6. The ink formulation as claimed in claim 1, wherein the polypropylene glycol has a molecular weight of 425 to 1000.

7. The ink formulation as claimed in claim 4, wherein the co-solvent is isopropyl alcohol or 2-pyrrolidinone.

8. The ink formulation as claimed in claim 1, wherein the formulation has a ratio of pigment to polypropylene glycol of at least 1: 1.

9. The ink formulation as claimed in claim 1, wherein the formulation has a minimum ratio of pigment to polypropylene glycol of about 1:1 to about 1:2.5.

10. An ink formulation comprising:

a pigment,

polypropylene glycol, and

water,

wherein the ink formulation has a minimum ratio of pigment to polypropylene glycol of about 1:1 to about 1:2.5.

11. The ink formulation as claimed in claim 10, wherein the ink formulation further comprises at least one additive.

12. The ink formulation as claimed in claim 11, wherein the additive is selected from the group consisting of co-solvents, bases, surfactants, deaerators and biocides.

13. The ink formulation as claimed in claim 12, wherein the co-solvent is isopropyl alcohol or 2-pyrrolidinone.

14. The ink formulation as claimed in claim 10, wherein the polypropylene glycol has a molecular weight of greater than 250 to about 1000.

15. The ink formulation as claimed in claim 10, wherein the polypropylene glycol has a molecular weight of 425 to 1000.

16. The ink formulation as claimed in claim 10, wherein the minimum ratio of pigment to polypropylene glycol is about 1:2.

17. An ink formulation comprising:
0.5 to 15% by weight of a pigment,
0.5 to 30% by weight of polypropylene glycol, and
55 to 99% by weight of water, wherein the percentages are based on the overall weight of the ink formulation and wherein the ink formulation has a ratio of pigment to polypropylene glycol of at least 1:1.

18. The ink formulation as claimed in claim 17, wherein the ratio of pigment to polypropylene glycol is about 1:2.

19. The ink formulation comprising:
1.5 to 7% by weight of a pigment,
3 to 14% by weight of polypropylene glycol, and
60 to 95.5% by weight of water, wherein the percentages are based on the overall weight of the ink formulation.

20. The ink formulation as claimed in claim 19, wherein the ink formulation comprises:

2.5 to 7% by weight of the pigment,

4 to 14% by weight of the polypropylene glycol, and

79 to 93.5% by weight of the water.

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